

# INDIAN INSTITUTE OF MATERIALS MANAGEMENT

Post Graduate Diploma in Logistics & SCM Post Graduate Diploma in Materials Management - 2 years PAPER No.14 (enrolment code – CPM, CPS) PAPER No. 12 (enrolment code- PMM, PSM,)

**June 2023** 

## **Inventory Management**

Date	: 17.06.2023	Max. Marks	: 70
Time	: 10.00 a.m to 1.00 p.m.	Duration	: 3 Hrs.

### Instructions:

1. From Part A – answer all questions (compulsory). Each sub questions carries 1 mark. Total: 20 Marks Total :30 Marks

2. From Part B – Answer any 3 questions out of 5 questions. Each question carries 10 marks. 3. Part C is a case study (compulsory) with questions. Read the case study carefully and answer the questions

Total: 20 Marks

Part – A	[20 Marks]
(Attempt all questions. Each sub question	carries 1 mark.)

### Q.1. Fill in the blanks. (Do not reproduce the statement) [5 marks]

- Goals of Inventory is to meet demand and mitigate shortage of ------. i)
- ii) -----Costs are incurred on storing of inventory before it is sold or consumed.
- Inventory Accounting Methods include -----iii)
- -----is the period between ordering the material and receiving in stores. iv)
- SOS Analysis is based on ----- of items V)

### Q. 2. State True or False (Do not reproduce the statement) [5 marks ]

- a) Lower COGS, in turn, increases the gross profit of the organization.
- b) Pareto principle states critical few is separated from the trivial many.
- c) In VMI ultimate responsibility to replenish the stock lies with Buyer
- d) Time-series forecasting method is used to predict future sales based on a different time period in the past.
- e) In Perpetual inventory model, the stock levels are regularly checked after a specific period.

#### Q.3. Expand the following: [5 marks ]

b) SMED c) TPM d) TQM e) FMCG a) EPQ

#### Q. 4. Match the following : [5 marks]

Column A			Column B
SI.	Description		Description
No.			
1.	FIFO	Α	Stock verification
2.	JIT	В	Sales
3.	POS	С	Card to control production.
4.	Kanban	D	Pull System
5.	Auditor	Е	Perishable Product.

(20 marks)

### (Attempt any 3. Each question carries 10 marks)

- Q.5 a) What are different types of inventory ? What are objectives inventory control ? [5 marks]
  - b) Explain Selective Inventory Control Methods and its criteria. [5 marks]
- Q.6 a) What is VMI? How you will implement it ? [5 marks]
  - b) Which Forecasting methods you will suggest for launch of innovative product and forecasting existing FMCG. Explain the methods. [5 marks]
- Q.7 a) Distinguish between MRP, MRP II and ERP. [5 marks] b) Explain JIT. What are requirement of JIT for implementation? [5 marks]
- Q.8 a) How you will control Finished Goods Inventory ? [5 marks] b) Explain various methods of Stock Verifications. [5 marks]
- Q. 9 Write short notes on any four: [4 x 5 = 20 marks]
  - a) Kaizen, Kanban, TPM
  - b) Inventory Control in Retail.
  - c) Principles of Forecasting
  - d) WIP Inventory
  - e) Security and Loss Prevention of stock

### PART - C

(Compulsory)

Q. 10 Compute ABC Analysis from the following data:

Item No		Annual Quantity	Unit cost Rs
101		360	100
102		300	1050
103		1800	6
104		1800	5
105		480	50
106		2400	1
107		3600	2
108		180	500
109		500	48
110		3000	2
111		1000	1
112		1000	1
A=80%	B=15%	C=5%	

# ....

- a) Work out Annual Cost of items.
- b) Arrange Annual Cost of items in descending order
- c) Show Cumulative Annual Cost
- d) Classify A category items as 80% of total cumulative value.
- e) Classify B category items as 15% if total cumulative value
- f) Classify C category items as 5% of total cumulative value